SONY

SB-V3000

MODEL

USER MANUAL

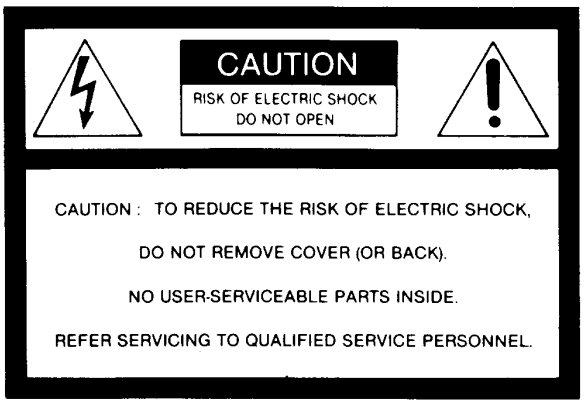
Owner's Record

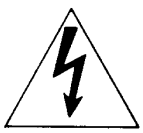
The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. SB-V3000 Serial No._____

Warning

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna
Relocate the equipment with respect to the receiver
Move the equipment away from the receiver
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

For the customers in Canada

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

Caution

Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

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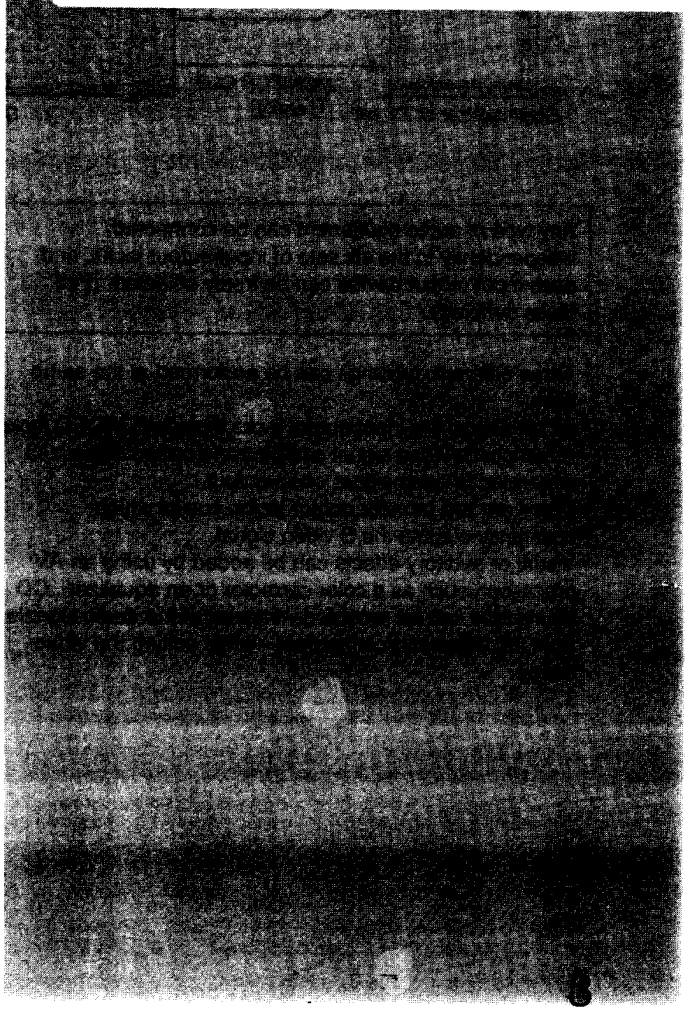
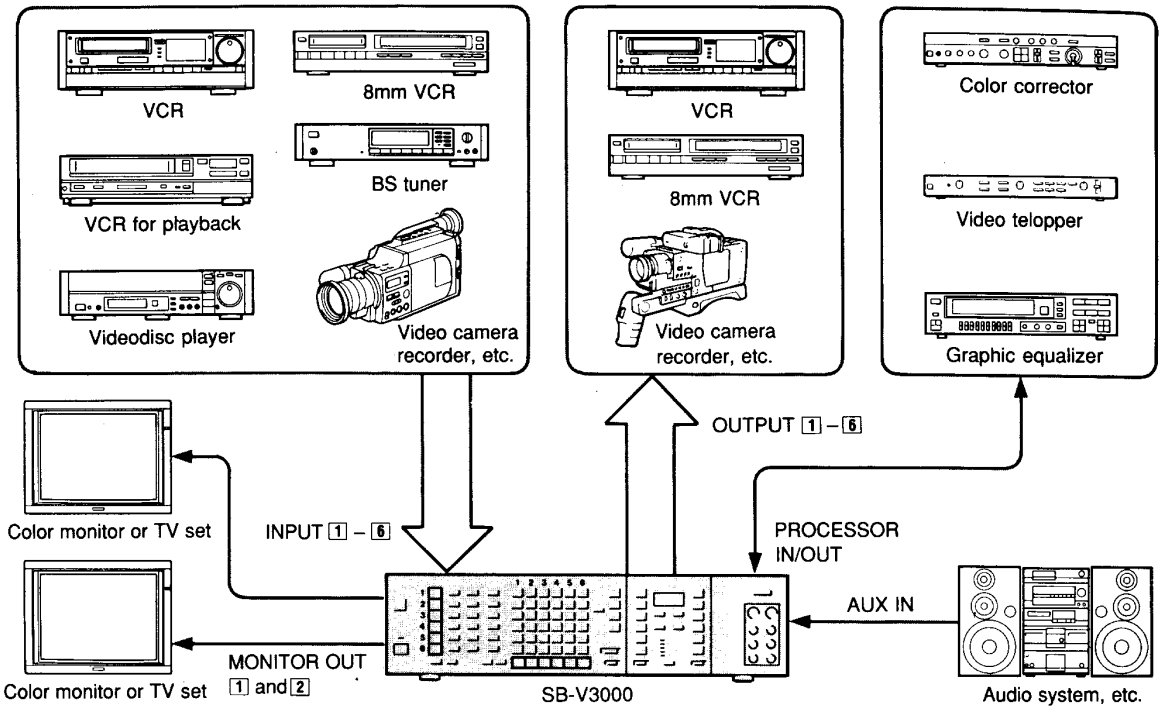


Outline

Various Kinds of Equipment Can Be Connected



Any type of audio equipment can be connected independently to the six sets of input/output jacks, and each input/output device can be freely selected. (Full cross dubbing)

- Three different dubbings can be performed at the same time.
- All six sets of the input/output jacks include S VIDEO jacks.
- A composite video signal can be transformed into a Y/C separated S video signal when output.
- There are two monitor output jacks, one of which constantly outputs the S video signal.
- Visual or auditory effects can be added by using an AV processor, such as a color corrector or an equalizer. CD sound also can be recorded—instead of the audio signals from the video source material—while editing the video image.

An easy and smooth operation

The buttons on the front panel allow you to easily complete the whole sequence of selecting input/output signals.

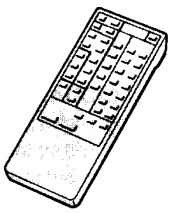
Three kinds of output mode can be selected

- Mode A is for secure and simple editing. INPUT and OUTPUT of the same number must be connected to the same equipment. The source from the equipment connected to INPUT [1], for example, is always recorded on the equipment connected to the OUTPUT other than [1]. If an inappropriate output is selected for an input, the MATRIX SELECT button blinks.
- Mode B is for flexible and diverse editing. INPUT and OUTPUT of the same number can be connected to any different kind of equipment. The source from the equipment connected to INPUT [1], for example, can be recorded on the equipment connected to OUTPUT [1].
- Mode C is for editing audio and video sources separately.

Up to 4 input/output combinations can be put into memory

The four memory buttons can memorize the input/output combinations preset with the buttons on the front panel, or how to use the monitor or the AV processor, etc. Just one press on the memory button turns the unit into the desired preset condition.

Accessories supplied



Remote commander
RMT-3000 (1)

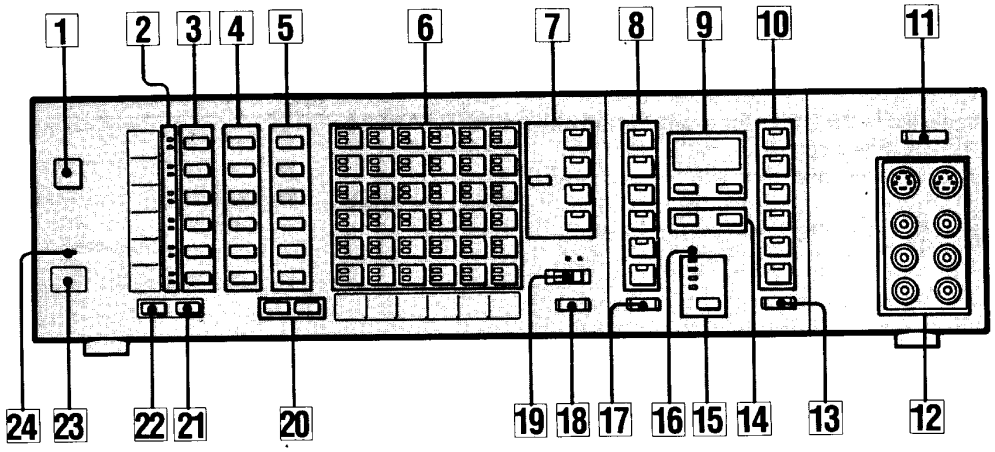
Size AA (R6) batteries (2)

Labels for INPUT/OUTPUT selection (1 set)

Location and Function of Controls

Front panel

Refer to the pages indicated in ● for details.



1 POWER switch

2 VIDEO indicators (S/V)
The S indicator lights up when the S video signal is input, and the V indicator lights up when the composite video signal is input. The unit automatically detects which signal is input.

3 V → S (composite → S video transforming) switches ㉖
Press to transform the composite video signal into the S video signal when output.

4 AUX (auxiliary) AUDIO selectors ㉖
Press to select the audio signal from the audio system connected to the AUX IN jacks at the rear, instead of the audio signal from the video equipment selected as an input source.

5 PROCESSOR selectors ㉗
Selects the input signal to which special effects are to be added, using the AV processor, such as a color corrector or a graphic equalizer. Press the selector whose number corresponds to that of the input jack for the input signal.

[6] MATRIX SELECT (input/output select) buttons ㉗
Selects input source and output destination equipment. Press the button at the position where the number of the input jack crosses that of the output jack.

[7] MEMORY (M1/M2/M3/M4) buttons/SET (memory set) button ㉚
Puts the preset input/output setting into memory. Press one of the MEMORY M1 - M4 buttons while pressing the SET button. To recall the memory, press the desired MEMORY button.

[8] MONITOR [1] selectors ⑳

[9] AUDIO ATTENUATOR indicator/▼▲ buttons ㉑
The indicator shows the attenuation amount of the volume currently output to monitor [1]. 0 indicates the highest volume and 60 the lowest. Press the ▼ button to increase the volume and press the ▲ button to decrease it.

[10] MONITOR [2] selectors ⑳

[11] FRONT/REAR [6] selector ⑮
Selects which of the [6] jacks are to be used; [6] jacks on the front or those at the rear. The indicator lights up when the FRONT is selected.

[12] IN/OUT (input/output) [6] S VIDEO/VIDEO/AUDIO jacks ⑮
Functions the same as the jacks [6] at the rear. It is useful for connecting equipment necessary for editing use, such as an 8mm video camera recorder. Select the front or rear jacks by using the FRONT/REAR [6] selector.

[13] INPUT/OUTPUT [2] (monitor [2] input/output) selector ⑳
Selects the signal output to monitor [2]; the signal currently input to the INPUT jack or the signal currently output from the OUTPUT jack.

[14] MUTING buttons ㉑
Press to mute the video (VIDEO) or audio (AUDIO) output to monitor [1]. Press the button again to cancel the muting.

[15] AUDIO MODE selector and indicators ㉑
Changes the sound output to monitor [1] to STEREO, MONO (monaural), LEFT (left channel only), or R (right channel only).

[16] AUTO Y/C SEPARATE indicator ⑲
Lights up when the output signal to monitor [1] is automatically transformed into the Y/C separated S video signal.

[17] INPUT/OUTPUT [1] (monitor [1] input/output) selector ⑳
Selects the signal output to monitor [1]; the signal currently input to the INPUT jack or the signal currently output from the OUTPUT jack.

[18] VIDEO/AUDIO selector ㉖
Selects the signal output to the OUTPUT jack: the video signal or the audio signal input from the equipment connected to the INPUT jack. Select the signal before specifying input/output equipment, using the MATRIX SELECT buttons. This selector functions only when the OUTPUT MODE switch is set to the C position.

[19] OUTPUT MODE switch and indicators ㉒
Selects either mode A, B, or C, whichever is most appropriate for your use. The mode B or C indicator lights up when the unit can be operated properly with the designated input/output equipment only in mode B or C.

[20] PROCESSOR PASS buttons (VIDEO/AUDIO) ⑯
If the connected AV processor is not equipped with either video or audio input jacks, press the corresponding button. Press the VIDEO button, for example, when an equalizer is connected.

[21] CLEAR button ㉙
Press to cancel all the settings made with MATRIX SELECT buttons, V → S switches, AUX AUDIO selectors, and PROCESSOR selectors. Use the button to do all the presettings over again. (The monitor output setting and the memory of the MEMORY button are not canceled.)

[22] MODE LOCK button (ON/OFF) ㉘
Press to fix the current input/output setting. No controls function except MONITOR [1], [2] selectors and the POWER switch. Press the button again to release the lock.

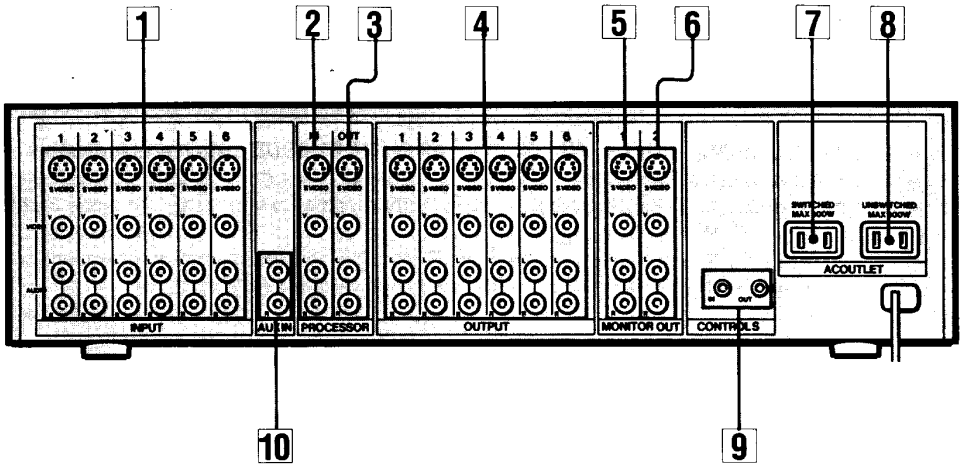
[23] Remote sensor

[24] STANDBY lamp
Lights up when the power is turned off by use of the remote commander while the POWER switch on the main unit is set to ON.

Location and Function of Controls

Rear panel

Refer to pages 13 to 17 for connections.



1 **INPUT 1 – 6 S VIDEO/VIDEO/AUDIO jacks** (4-pin mini DIN/phono jack)

2 **PROCESSOR IN (processor input) S VIDEO/VIDEO/AUDIO jacks** (4-pin mini DIN/phono jack)

3 **PROCESSOR OUT (processor output) S VIDEO/VIDEO/AUDIO jacks** (4-pin mini DIN/phono jack)

4 **OUTPUT 1 – 6 S VIDEO/VIDEO/AUDIO jacks** (4-pin mini DIN/phono jack)

5 **MONITOR OUT (monitor output) 1 S VIDEO/VIDEO/AUDIO jacks** (4-pin mini DIN/phono jack)
If the composite video signal is input, the Y/C separated signal also is output from the S VIDEO jack.

6 **MONITOR OUT (monitor output) 2 S VIDEO/VIDEO/AUDIO jacks** (4-pin mini DIN/phono jack)
Outputs composite video signal when composite video signal is input, or outputs S video signal when S video signal is input. No signal transformation or adjustment is possible for the signals output from these jacks.

7 **SWITCHED AC OUTLET** (max. 300 W)

8 **UNSWITCHED AC OUTLET** (max. 300 W)

9 **CONTROL S input/output jacks** (mini jack)
Connect to Sony video equipment having the CONTROL S input/output jacks. For connection, use an optionally available Sony connecting cord RK-G69.

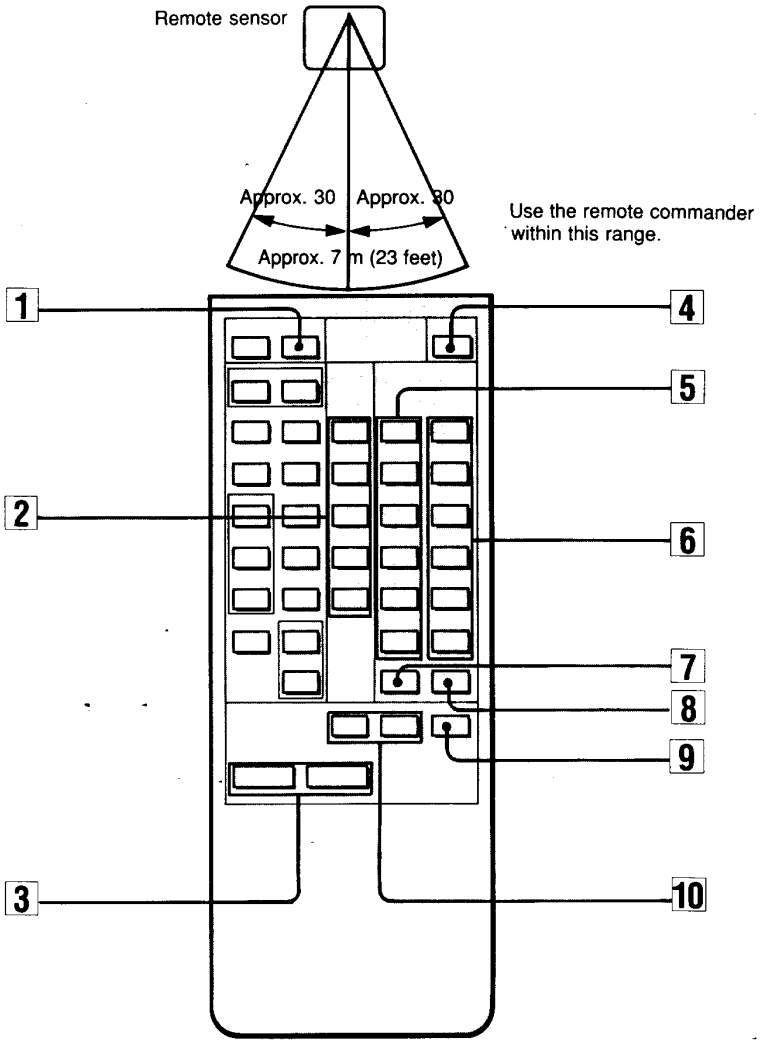
10 **AUX IN (auxiliary input) jacks** (phono jack)

Function of the S VIDEO INPUT/OUTPUT jacks
A finer and clearer picture can be obtained in both recording and playback with the use of the S VIDEO jacks. The S VIDEO INPUT/OUTPUT jacks input and output separately the Y (luminance) and the C (color) signal of the video signal, which minimizes the loss of both signals when recording and playing back a picture.

This unit incorporates the circuit that separates the Y and the C signals. The signal input from the video equipment without S video jacks can be transformed into the S video signal and output to video equipment with the S video jacks. See page 26 for details.

Remote Commander

Refer to pages 32 to 33 for operation using the remote commander.



1 CLEAR button

2 MEMORY buttons (M1/M2/M3/M4)/SET (memory set) button

3 AUDIO ATTENUATOR ▼▲ buttons
Press ▼ to increase the volume on the MONITOR 1 output, or press ▲ to decrease volume.

4 POWER switch
Press to turn the unit on or off when the POWER switch on the main unit is set to ON.

5 MONITOR 1 select buttons

6 MONITOR 2 select buttons

7 INPUT/OUTPUT 1 (monitor 1 input/output select) button

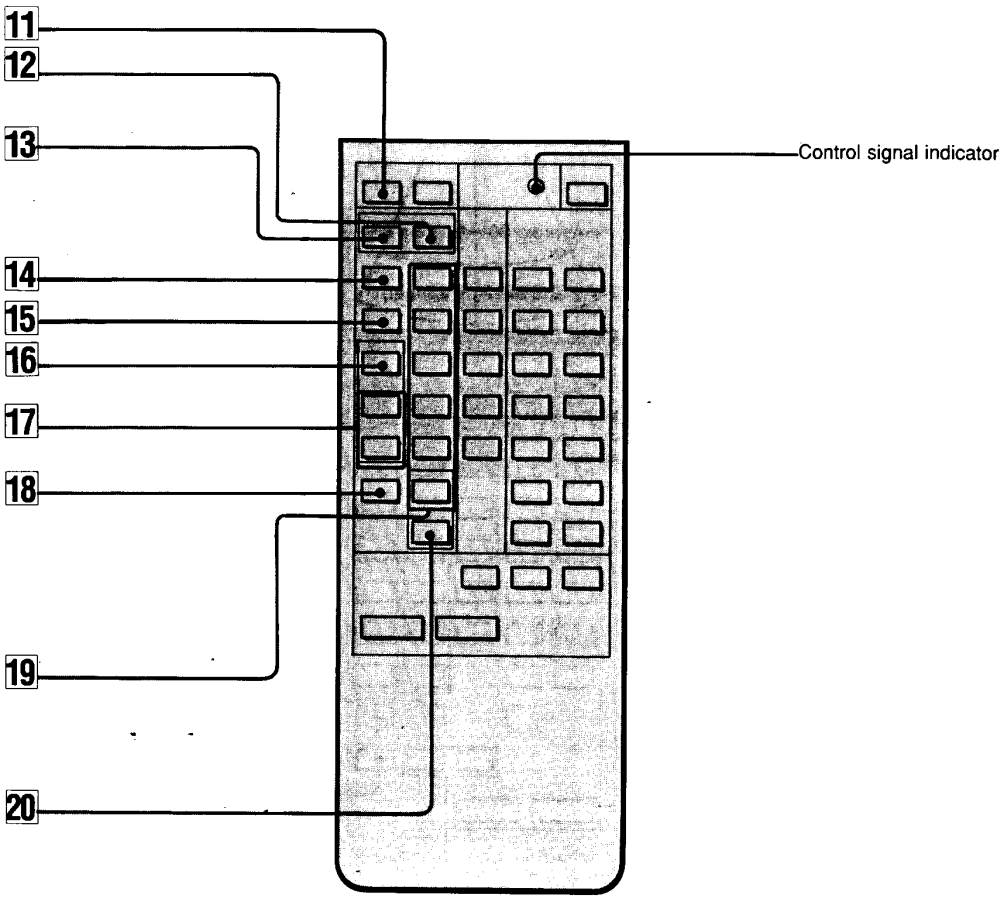
8 INPUT/OUTPUT 2 (monitor 2 input/output select) button

9 AUDIO MODE selector

10 MUTING buttons

Location and Function of Controls

Refer to pages 32 to 33 for operation using the remote commander.



11 MODE LOCK button (ON/OFF)

12 MATRIX button
Press this button first when selecting the equipment for input/output.

13 CANCEL button
Press to cancel an operation in which two or more buttons of the remote commander are pressed in sequence.

14 V → S (composite → S video transforming) switch

15 AUX AUDIO selector

16 PROCESSOR selector

17 PROCESSOR PASS buttons (VIDEO/AUDIO)

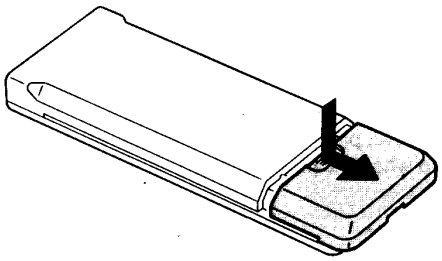
18 MODE C V/A (mode C video/audio) selector
Press to input only the video or audio signals from the input equipment. This button functions only when the OUTPUT MODE switch on the main unit is set to C.

19 1 – 6 (jack number) selectors
Press to select the jack for input/output. Use these selectors together with the MATRIX button, the V → S switch, the AUX AUDIO or the PROCESSOR selector on the remote commander. For details, see page 32.

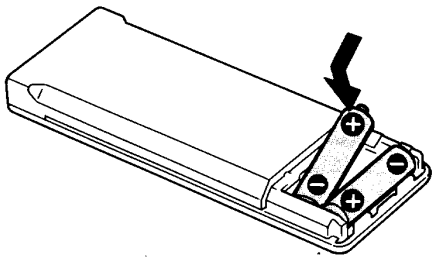
20 FRONT/REAR (jack 6 front/rear select) button

Installing Batteries

1 Open the lid.



2 Install two size AA (R6) batteries with the correct polarities, and close the lid.



Battery life

About six months of normal operation can be expected when using the Sony SUM-3(NS) batteries. When the batteries are run down, the remote commander will not operate the unit. In this case, replace both batteries with new ones.

Notes on the [illegible] operation

- Keep the commander away from extremely hot or humid places.
- Avoid dropping any foreign objects into the commander casing, particularly when replacing the batteries.
- To avoid a malfunction, do not simultaneously depress two or more buttons.
- Avoid exposure of the remote sensor to direct sunlight or lighting apparatus. Such exposure can cause a malfunction.

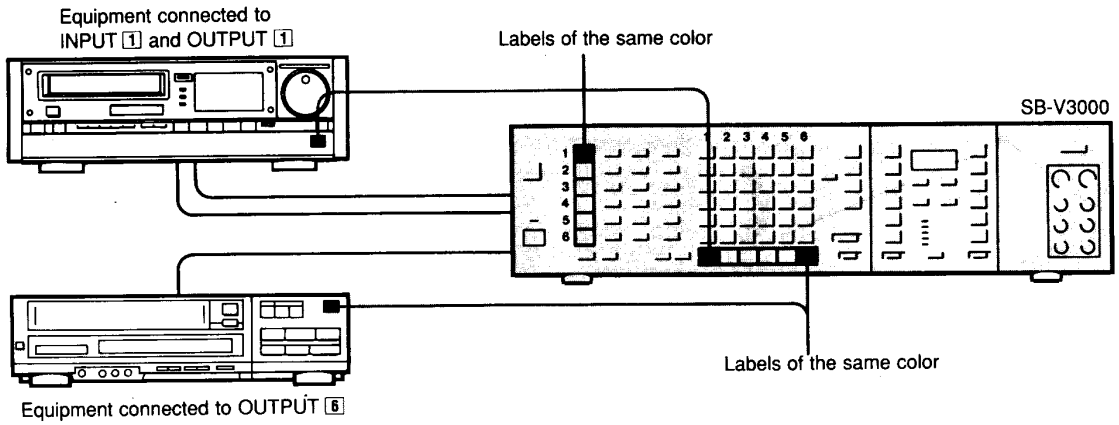
Before Connection

Precautions

- Plug in the AC power cord of each piece of equipment to the wall outlet after connecting all the equipment.
- Connect the connecting cord so that the color of each plug corresponds to that of the jacks on the SB-V3000 and on the other equipment.

Using the Labels Supplied

After connecting all the equipment, place the labels for input/output selection (supplied) on the front panel of the unit and the connected equipment, so that you can easily see which jack corresponds to what equipment.

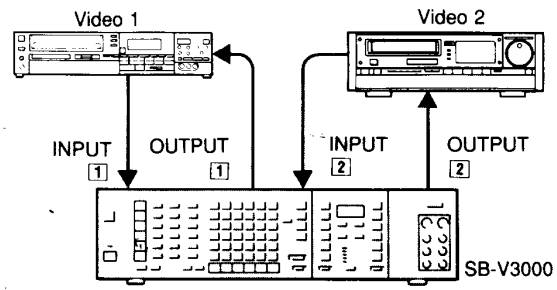

Equipment connected to
INPUT 1 and OUTPUT 1
Labels of the same color
SB-V3000
Labels of the same color
Equipment connected to OUTPUT 6

Connecting Video Equipment According to the Selected Mode

See pages 22 to 23 for details of mode A, B, and C.

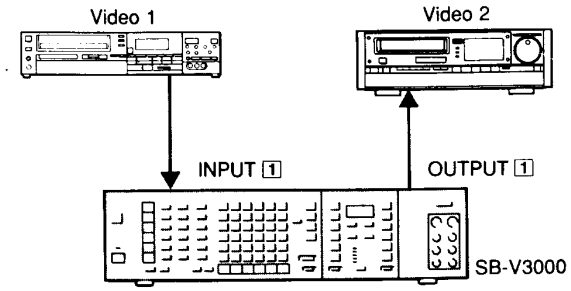
Connection for mode A

In mode A, video equipment is connected to the input and the output jack of the same number. Editing operations will be easier, because one piece of equipment corresponds to one jack number; the video equipment can be identified with a number such as 1 or 2, in accordance with the connected jack number, for example.



Connections for mode B or C

In mode B or C, two different kind of equipment can be connected to the input and the output jacks of the same number. More versatile and flexible editing is possible with various choices of input/output equipment.

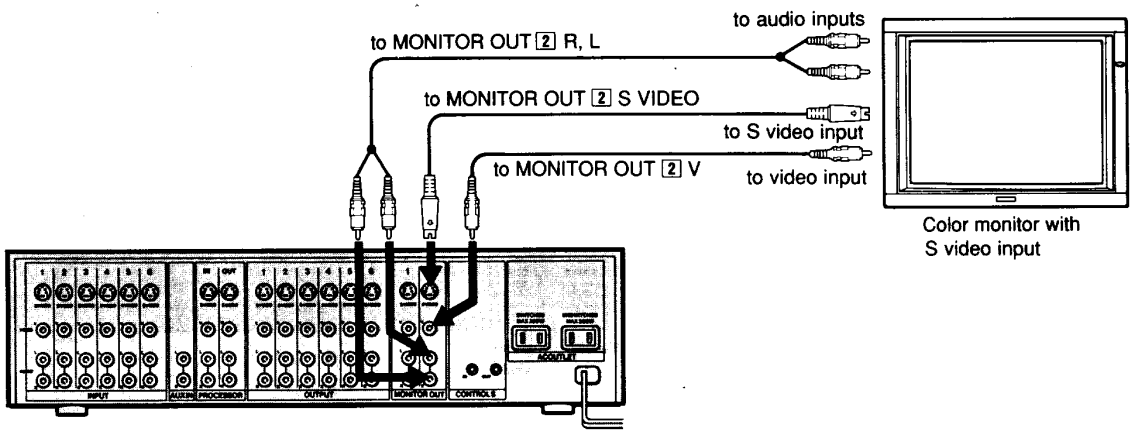


Connecting a Color Monitor or a TV

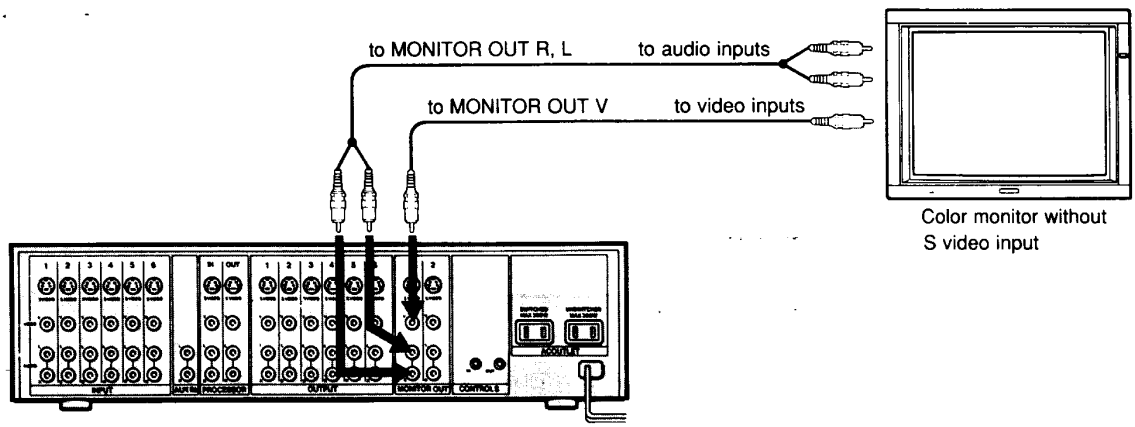
For the recommended connecting cords, see "Specifications."

When using a TV, you will need one with a video or S video input jack.
There are two monitor output jacks, MONITOR OUT [1] and [2].
Video and audio levels of only the MONITOR OUT [1] can be adjusted using the AUDIO MODE selectors, MUTING buttons, and AUDIO ATTENUATOR ▼▲ buttons. Video and audio levels of the MONITOR OUT [2] cannot be adjusted.

Connecting a Color Monitor with an S Video Jack


to audio inputs
to MONITOR OUT [2] R, L
to MONITOR OUT [2] S VIDEO
to S video input
to MONITOR OUT [2] V
to video input
Color monitor with
S video input

Connecting a Color Monitor without an S Video Jack

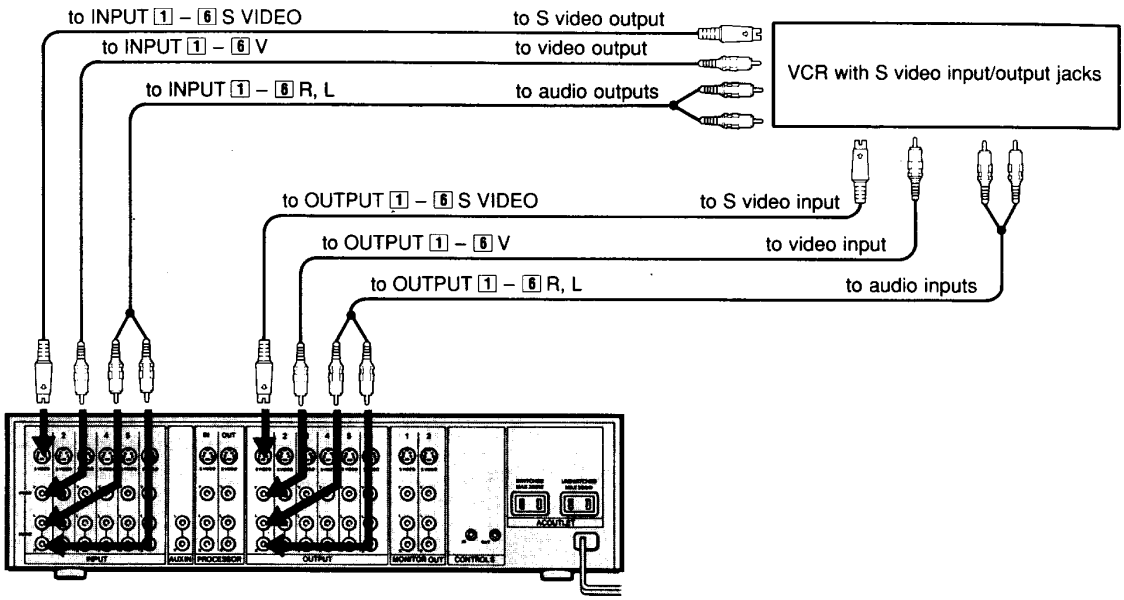


When the audio input of the color monitor is monaural
Use an RK-C71 (3m) or an RK-C72 (1m) connecting cord.

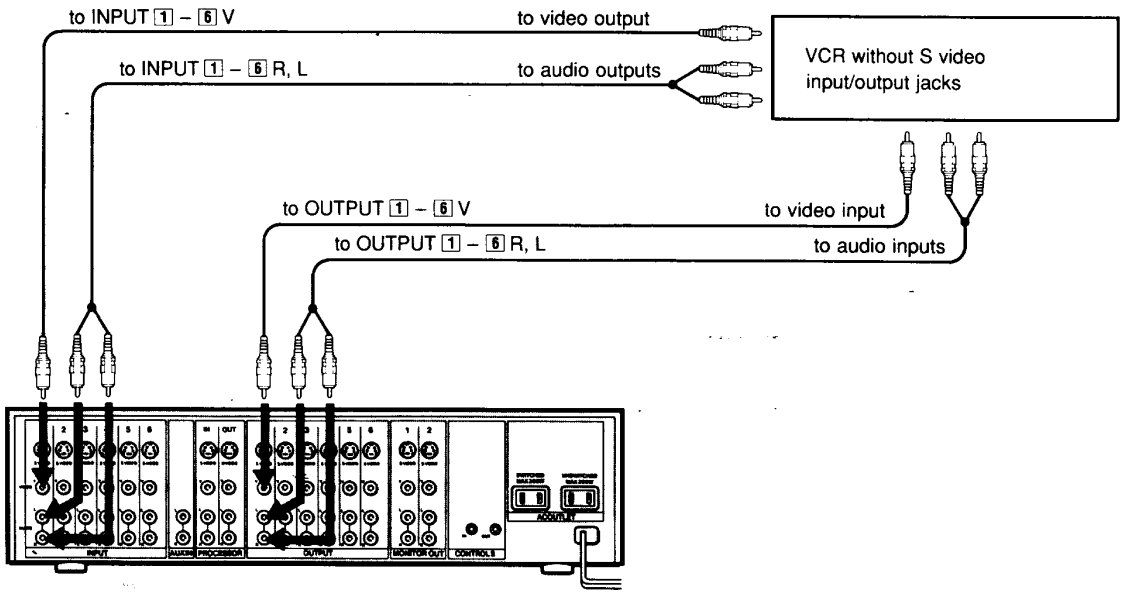
Connecting Video Equipment

For the recommended connecting cords, see "Specifications."

Connecting a VCR with an S Video Jack


to INPUT 1 – 6 S VIDEO
to INPUT 1 – 6 V
to INPUT 1 – 6 R, L
to S video output
to video output
to audio outputs
VCR with S video input/output jacks
to OUTPUT 1 – 6 S VIDEO
to OUTPUT 1 – 6 V
to OUTPUT 1 – 6 R, L
to S video input
to video input
to audio inputs

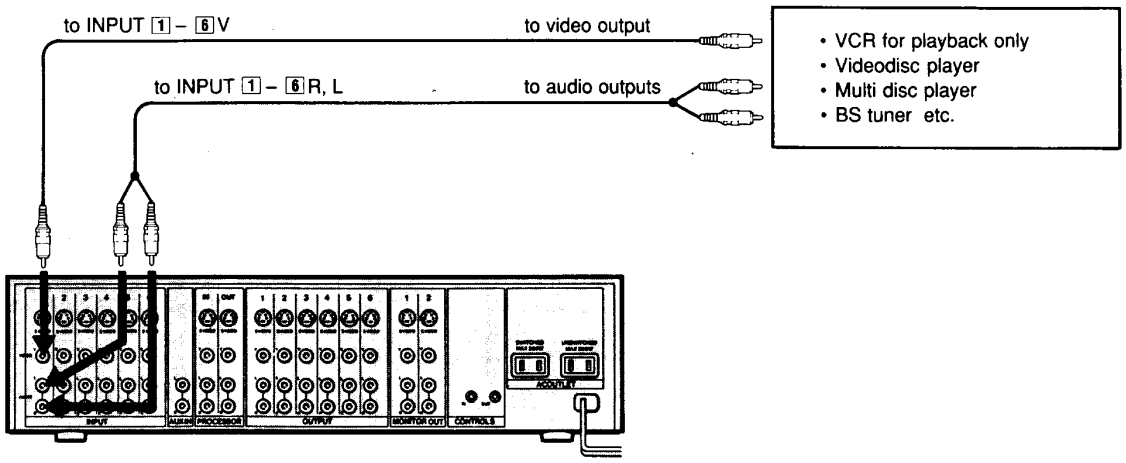
Connecting a VCR without an S Video Jack


to INPUT 1 – 6 V
to INPUT 1 – 6 R, L
to video output
to audio outputs
VCR without S video input/output jacks
to OUTPUT 1 – 6 V
to OUTPUT 1 – 6 R, L
to video input
to audio inputs

When connecting a VCR with monaural audio jack
Use a VMC-910MS (1m) or a VMC-920MS (2m) connecting cord.

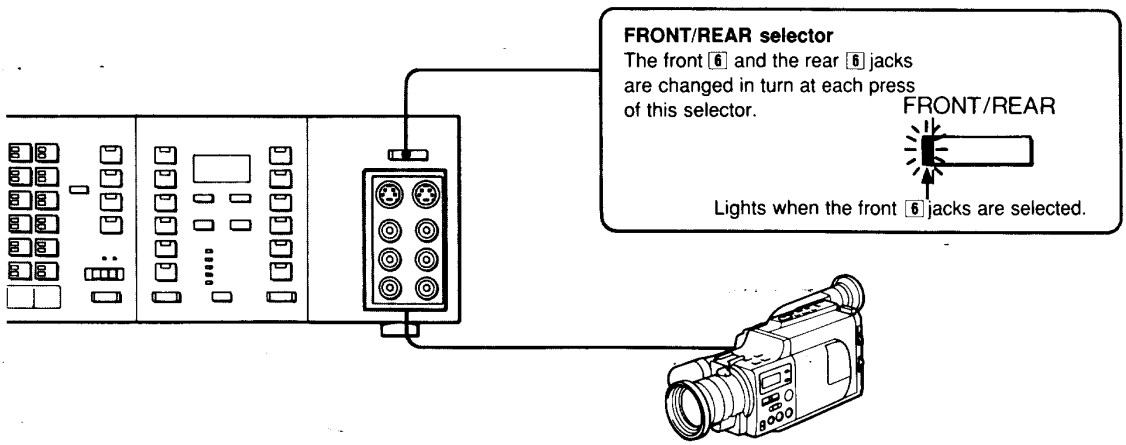
Connecting a Video Player

Video players do not have a picture recording function as other ordinary VCRs do, and among them are a VCR for playback only, a videodisc player, and a multi disc player. A BS tuner can also be connected to this unit in the same manner as the VCRs for playback only. Connect this equipment only to the input jacks of this unit.


to INPUT 1 – 6 V
to video output
to INPUT 1 – 6 R, L
to audio outputs
• VCR for playback only
• Videodisc player
• Multi disc player
• BS tuner etc.

Using the Input/Output Jacks on the Front Panel

You can use the input/output 6 jacks on the front or at the rear, whichever is convenient to connect the equipment. Select the jacks on the front or at the rear, using the FRONT/REAR selector above the IN/OUT 6 jacks on the front panel.


FRONT/REAR selector
The front 6 and the rear 6 jacks are changed in turn at each press of this selector.
FRONT/REAR
Lights when the front 6 jacks are selected.

The input/output 6 jacks on the front panel can be used to connect a video camera recorder, such as a video camera recorder.

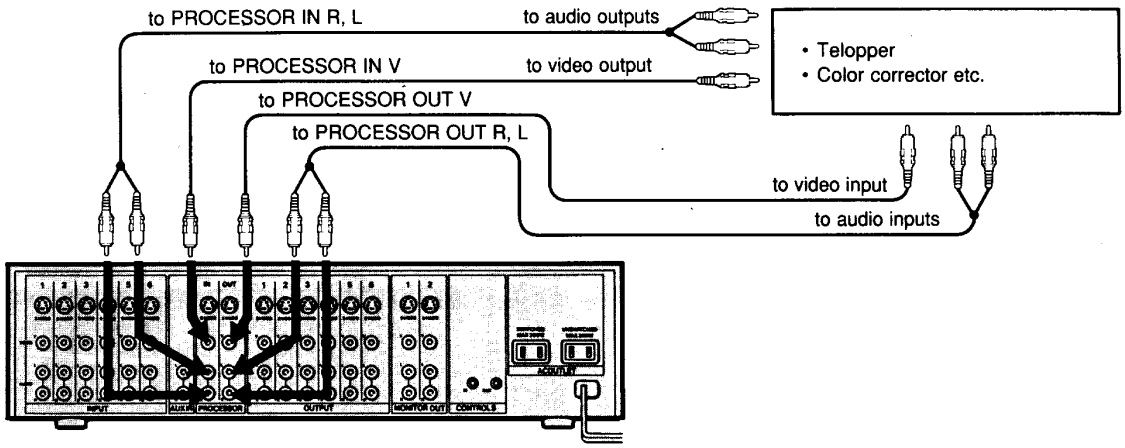
Connecting AV Processor

For the recommended connecting cords, see "Specifications."

The equipment used to provide special effects to the video image and to sound are called AV processors.

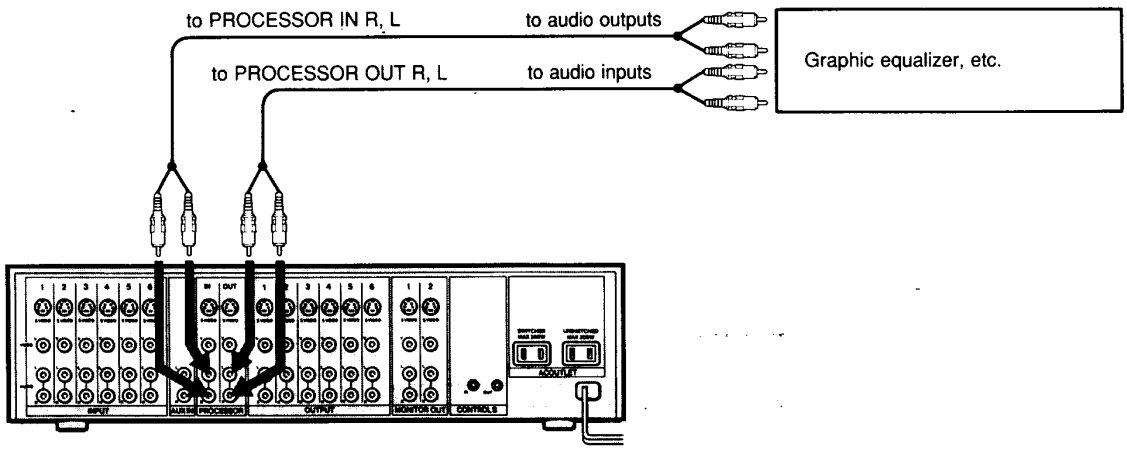
Connecting an AV Processor that Adds Special Effects for Picture

A telopper or a color corrector are used to provide visual effects, for example.



Connecting an AV Processor that Adds Special Effects for Sound

A graphic equalizer is used for auditory effects, for example.



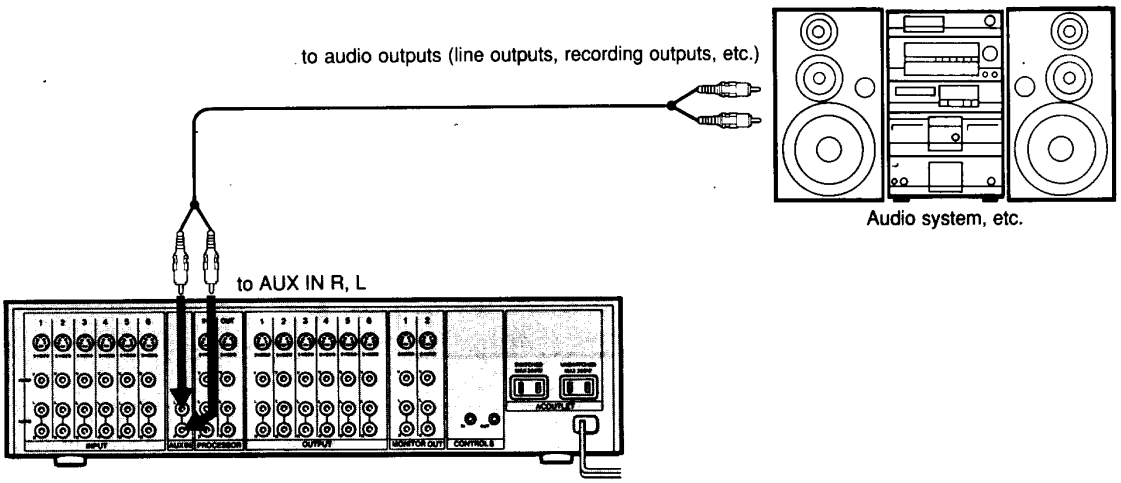
Using an AV processor with the S video jacks
Connect the S video jacks of this unit and the AV processor, in addition to the connections shown in the above diagram.

Using an AV processor without video or audio input/output
When editing with the AV processor, press either button of the PROCESSOR PASS buttons, AUDIO or VIDEO, which are not provided in the processor. The corresponding indicator will light up. Press the VIDEO button when using a graphic equalizer that has no video jack, for example.

Connecting Audio System

For the recommended connecting cords, see "Specifications."

If an audio system is connected to the AUX IN jacks, you can record the sound from the audio system while editing the video image, which is called "after-recording."



Connecting an audio system to the INPUT jacks
The audio system also can be connected, as an audio source, to one of the INPUT 1 – 6 jacks of this unit. In this case, perform editing in mode C and select only the audio signal from the INPUT jacks where the audio system is connected. See page 26 for details.

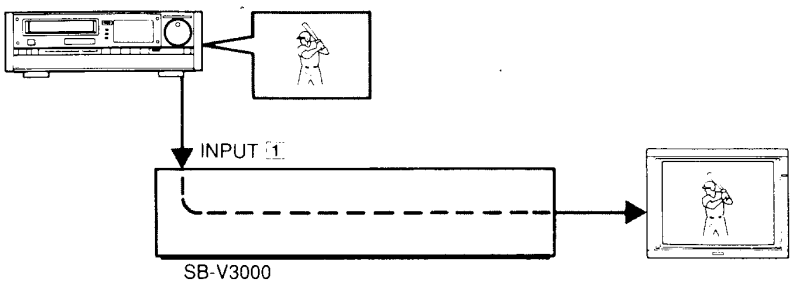
Monitoring the Picture from the Video Equipment

Pictures Which Can Be Watched on the Connected Monitor

You can monitor the following pictures on the monitor connected to the MONITOR OUT [1] or [2] jacks.

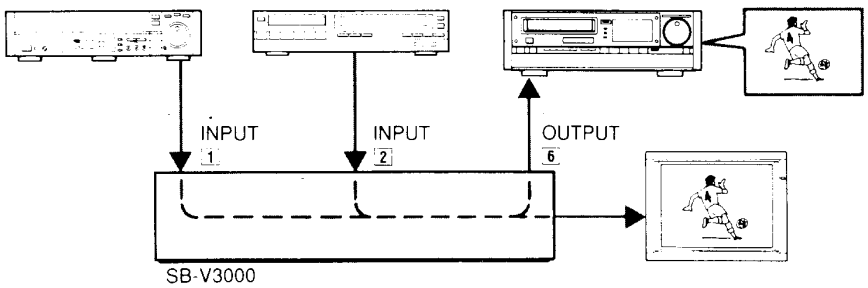
- **The playback picture from the video equipment connected to one of the INPUT [1] – [6] jacks**

  Example: Monitoring the playback picture from the VCR connected to the INPUT [1].



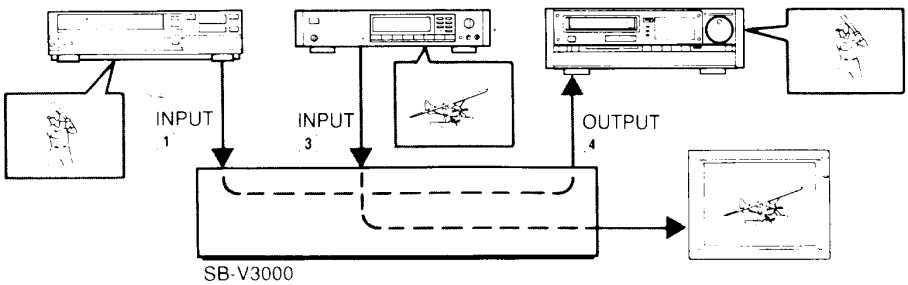
- **The picture being edited with this unit**

  Example: When recording in turn the picture from the videodisc player connected to INPUT [1] and that from the 8 mm VCR connected to INPUT [2] on the VCR connected to OUTPUT [6], the picture being recorded can be monitored.



- **The picture from the video equipment which is not used for editing**

  Example: The picture from the BS tuner connected to INPUT [3] can be monitored while copying the picture from the VCR connected to INPUT [1] on the VCR connected to OUTPUT [4].



Two Sets of Monitor Output

This unit has two sets of monitor output which differ, as shown below.

Monitor output	Auto switch function to S video signal	Adjustable items
MONITOR OUT 1	Yes	• Audio output level • Audio mode (stereo/monaural/left only/right only) • Video/audio muting
MONITOR OUT 2	No	No adjustment is possible, since this jack passes the input signal to the monitor as it is.

Auto switch function to the S video signal

The MONITOR OUT 1 jack is equipped with the automatic Y/C separate circuit. The circuit automatically turns on or off, depending on whether or not the input signal includes the S video signal. The AUTO Y/C SEPARATE indicator lights up when the circuit turns on. (You can select manually with the V → S switches whether or not the composite video signal input from the INPUT jacks is transformed into the Y/C separated signal.)
The relation between the input signal and the output signal from the MONITOR OUT 1 is shown below.

Input signal		Signal output from MONITOR OUT 1	
S video signal	V → S switch	Signal output from S VIDEO	Automatic Y/C separate circuit
Yes*	OFF	S video signal	OFF
Yes*	ON	Y/C separated signal out of composite video signal	OFF
No	OFF	Y/C separated signal out of composite video signal	ON**
No	ON	Y/C separated signal out of composite video signal	ON**

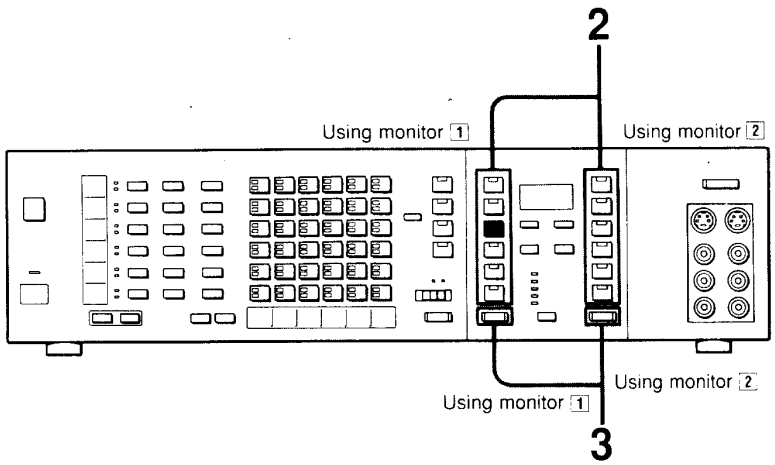
* VIDEO indicator S will light up.
** AUTO Y/C SEPARATE indicator will light up.

If the monitor with S video input is connected to MONITOR OUT 1, any picture can be viewed in S video signal. As for MONITOR OUT 2, the video image input to or output from this unit goes out of these jacks as it is. The signal of the image to be viewed, therefore, must match the type of the input jacks on the connected monitor.

Monitoring the Picture from the Video Equipment

Operation

After deciding which picture is to be watched on which monitor, proceed to the following operation.



This illustration shows how the picture output from the OUTPUT 3 jack is viewed on monitor 1.

1 Turn on the power to the monitor, the video/audio selector, and the desired video equipment.

2 MONITOR selectors
Press the number 1–6 assigned for the jack where the desired video equipment is connected. The pressed button lights up.

3 INPUT/OUTPUT selector
Select the picture to be monitored: the picture input to the INPUT jacks chosen in step 2, or that output from the OUTPUT jacks. Each press on the button switches the picture to the input or the output one, and the button corresponding to the selected picture lights up.

4 Start playback or recording on the video equipment.

When using an AV processor
To monitor the picture being edited with an AV processor, select the output jacks where the recording VCR is connected with the choice of OUTPUT for the INPUT/OUTPUT selector, or select the input jacks with the choice of INPUT for the INPUT/OUTPUT selector. To monitor the picture to which special effects are not provided by the AV processor, press VIDEO of the PROCESSOR PASS buttons. Do not press the PROCESSOR PASS button during editing, or the picture without the special effects will be recorded.

Note on the audio level
This video/audio selector does not include an amplifier. If the monitor 1 volume does not increase to the desired level with the ▼▲ buttons, adjust the volume on the connected amplifier or monitor.

Buttons and selectors effective during monitoring the picture
When using the monitor connected to the MONITOR 1 jacks, the following buttons and selectors of this unit function during monitoring the picture.

MUTING buttons (VIDEO, AUDIO): Mutes picture and sound respectively.
AUDIO MODE selectors: Switches the sound to stereo, monaural, left channel only, or right channel only. If the left only or the right only is selected with a stereo monitor, the left or right sound will be heard from both speakers.
▼▲ buttons: Adjusts the volume.

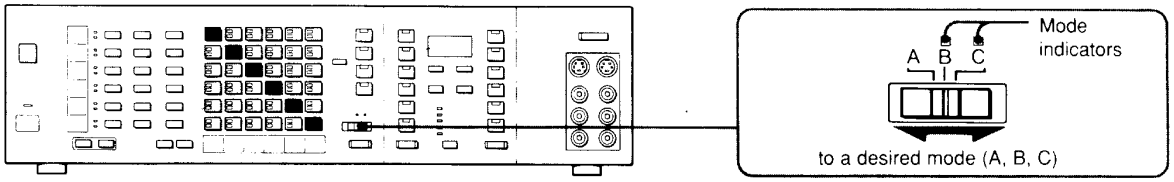
The above buttons and selectors adjust only the picture displayed on the monitor and the sound heard from the speakers; thus the recorded signals are not affected even if they are operated during editing.

Note on adjusting the volume of monitor 1
Noise may be heard while the volume of monitor 1 is being adjusted with the ▼▲ buttons. Do not adjust the volume while recording the picture and sound recorded on monitor 1, or the noise also will be recorded. Noise is not heard when monitor 2 is selected.

Editing

Three Output Modes for Editing

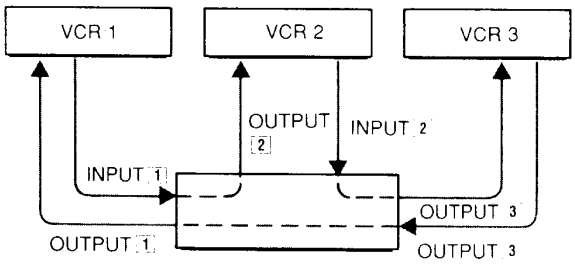
You can select one of the three output modes: A, B, and C—whichever one is most appropriate for the use of this unit. Select the desired mode with the OUTPUT MODE switch on the front panel.



■ The shadowed buttons do not function in mode A.

For simple and secure editing–Mode A

Select mode A for simple and secure editing, such as recording the playback picture from a single VCR on another VCR. Video equipment is connected to the input and output jacks of the same number, and the video equipment can easily be identified with the jack number during editing. This video/audio selector has 6 sets of input/output jacks, and 3 different kind of editing can be performed at the same time. Recording and playback cannot be made simultaneously on the equipment connected to the input and output jacks of the same number. In this mode, the input/output system where video and audio signals go out and come in in cycle, as shown in the following diagram, is not possible.

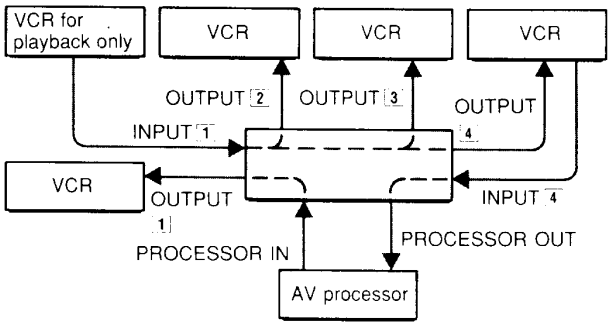


For diverse and flexible editing–Mode B

Select mode B for more flexible and diversified editing. This could be recording the playback picture and sound of a single VCR on a few other VCRs, while adding special effects to the picture and sound being recorded on one of the VCRs, and then recording it again on another VCR. In this mode, different kind of equipment can be connected to the input and output jacks of the same number. And then you can set up the input/output system where video and audio signals go out and come in in cycles, which is not possible in mode A.

Example

As shown in the diagram below, you can copy the playback picture and sound of the VCR connected to INPUT 1 on the VCRs connected to OUTPUT 2, 3, and 4. At the same time, you can record on the VCR connected to OUTPUT 1 the picture and sound being recorded on the VCR connected to OUTPUT 4, while adding special effects to them using the AV processor.

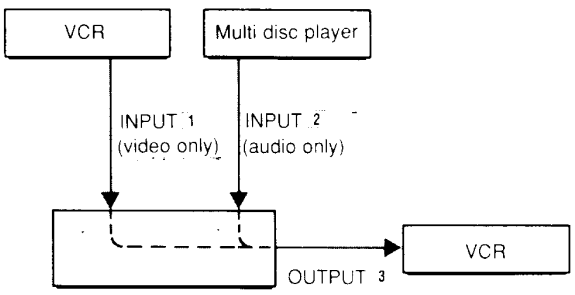


For editing picture and sound separately–Mode C

In addition to the functions available in mode B, video and audio signals can be edited separately in mode C. **Select mode C when editing the picture and sound separately.**

Example

As shown in the diagram below, you can record on the VCR connected to OUTPUT 3 the video signal of the VCR connected to INPUT 1 as well as the audio signal of the compact disc played back on the multi disc player connected to INPUT 2.



When the mode indicator lights up ?
The OUTPUT MODE indicator does not light up just by setting the OUTPUT MODE switch. The mode B indicator lights up when you have made the input output designation for editing that is allowed only in mode B, with the OUTPUT MODE switch set to B. The mode C indicator lights up when you press one of the MATRIX SELECT buttons with the OUTPUT MODE switch set to C.

When the mode indicator blinks ?
The mode B indicator blinks when you set the OUTPUT MODE switch to A and start operation with the input output setting allowed only for mode B.
The mode C indicator blinks when you set the OUTPUT MODE switch to A or B with the input output setting allowed only for mode C. Reset the switch to the correct position in both cases.

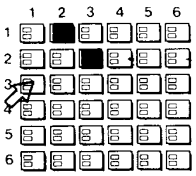
Editing

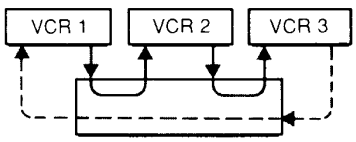
If the MATRIX SELECT Button Blinks in Mode A

One of the MATRIX SELECT buttons blinks if you make the input/output designation where video and audio signals go out and come in in cycle, which is not possible in mode A. The MATRIX SELECT button last pressed will not light up, but one of the buttons already lit will blink for about 5 seconds. To cancel the button last pressed, press the blinking button until it stops blinking and lights up again. If the blinking button is not pressed within 5 seconds, the input/output designated with the blinking button will be canceled, and the button last pressed will become valid instead. (The button last pressed will light up.)

Example of wrong input/output designation in mode A

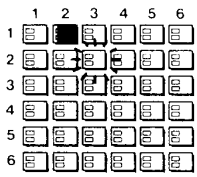
You have designated the signals to flow from VCR 1 to 2, and 2 to 3, by pressing the shadowed buttons; and now you press the button indicated by the arrow to make the signals return from 3 to 1. The designation from 3 to 1 is temporarily suspended.

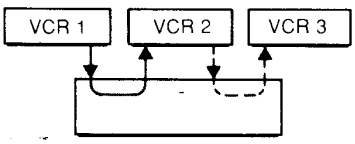




----→ is the wrong designation.

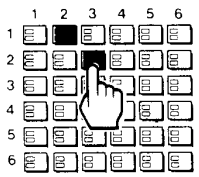
button blinks warning that the designation from [2] to [3] is going to be canceled.

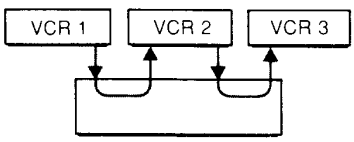




The ----→ designation is given the warning.

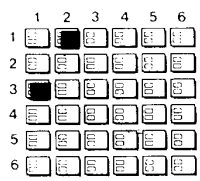
If the blinking button is pressed.

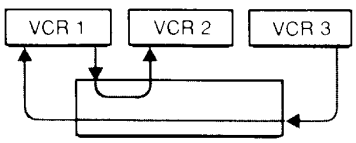




The designation made last will be canceled.

If the button is left blinking for 5 seconds.



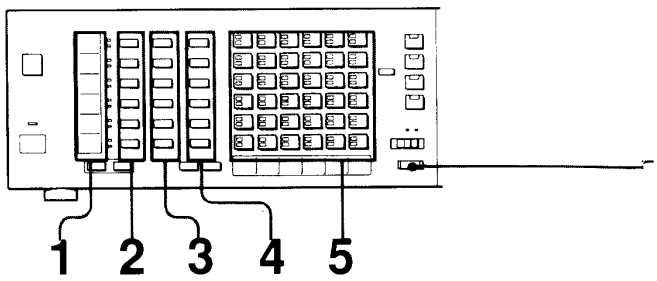


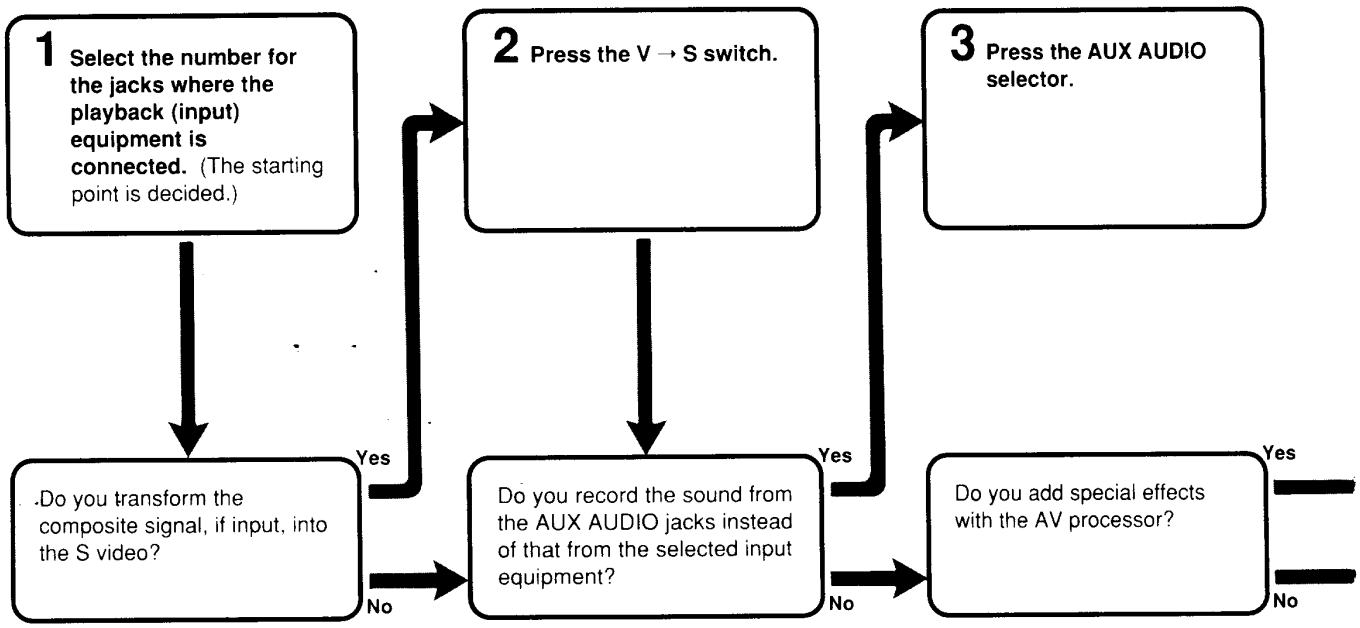
The designation from 2 to 3 will be canceled and the last designation will become valid.

Editing

Editing Operation Flow Chart

First select the equipment for playback by specifying the jack where the equipment is connected. The jack can be specified with the jack number buttons on the left side of the front panel, which will be the starting point for the editing operation.




1 Select the number for the jacks where the playback (input) equipment is connected. (The starting point is decided.)
2 Press the V → S switch.
3 Press the AUX AUDIO selector.
Do you transform the composite signal, if input, into the S video?
Yes
No
Do you record the sound from the AUX AUDIO jacks instead of that from the selected input equipment?
Yes
No
Do you add special effects with the AV processor?
Yes
No

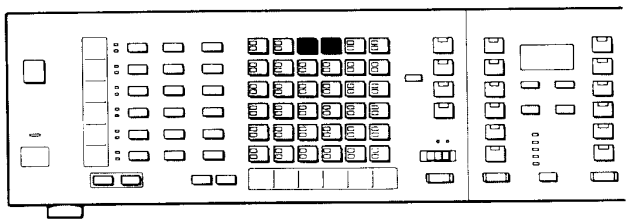
Use of V → S switch

Press the V → S switch to transform the input composite video signal into the S video signal when output. (The V indicator lights up when the composite video signal is input.) Note that this unit has three separate Y/C circuits for S video transformation. Each circuit is shared by a pair of inputs, INPUT 1 and 2, INPUT 3 and 4, INPUT 5 and 6, so both inputs of a pair cannot be transformed at the same time.

VIDEO/AUDIO selector
When the OUTPUT MODE switch is set to mode C, designate in advance the output signal: the video signal (VIDEO) or the audio signal (AUDIO) of the input equipment. Each press on the VIDEO/AUDIO selector switches VIDEO and AUDIO in turn.

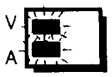
4 Press the PROCESSOR selector.

5 Select the output equipment and press the MATRIX SELECT button.
Example: Input from INPUT [1] and output to OUTPUT [3] and [4].



■ Press the shadowed buttons.

In mode A or B
The indicators above (V: video) and below (A: audio) the MATRIX SELECT button light up.



In mode C
The indicator above or below the MATRIX SELECT button lights according to the VIDEO/AUDIO selector setting.

Outputs only video signal.

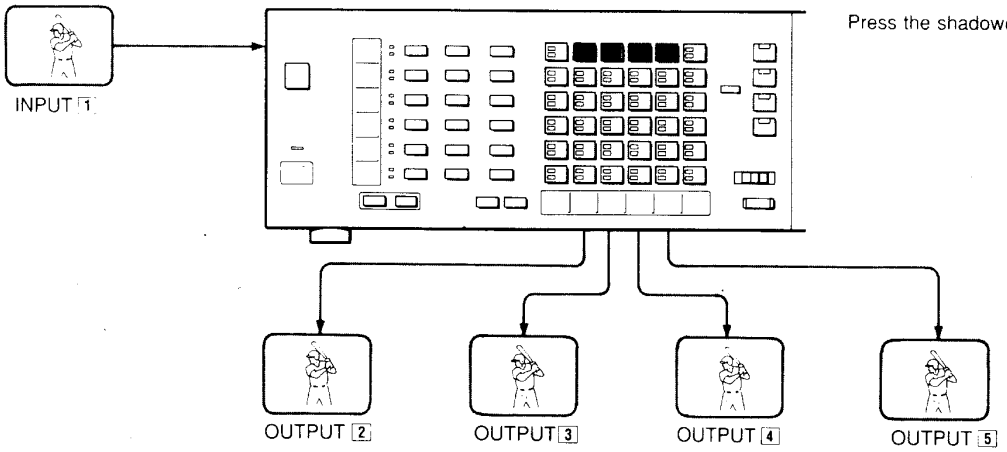
Outputs only audio signal.

Return to step 1, and designate next input/output.

To input both video and audio signals from video equipment in mode C
First select either the video or audio signal with the VIDEO AUDIO selector and press the MATRIX SELECT button for designating input output equipment. Then press the VIDEO AUDIO selector again to select the other signal and press the same MATRIX SELECT button.

Editing

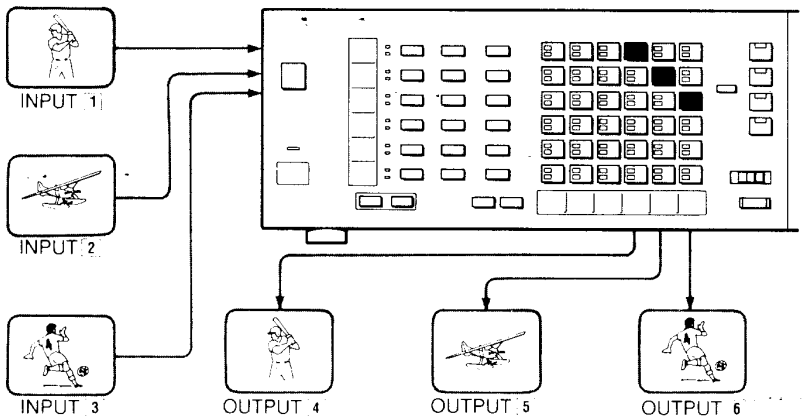
Example 1 Recording the playback picture from a VCR on other VCRs



Press the shadowed buttons.

The playback picture from the VCR connected to INPUT 1 is recorded on the VCRs connected to OUTPUT 2, OUTPUT 3, OUTPUT 4, and OUTPUT 5.

Example 2 Recording the playback pictures from three VCRs on three other VCRs at the same time.



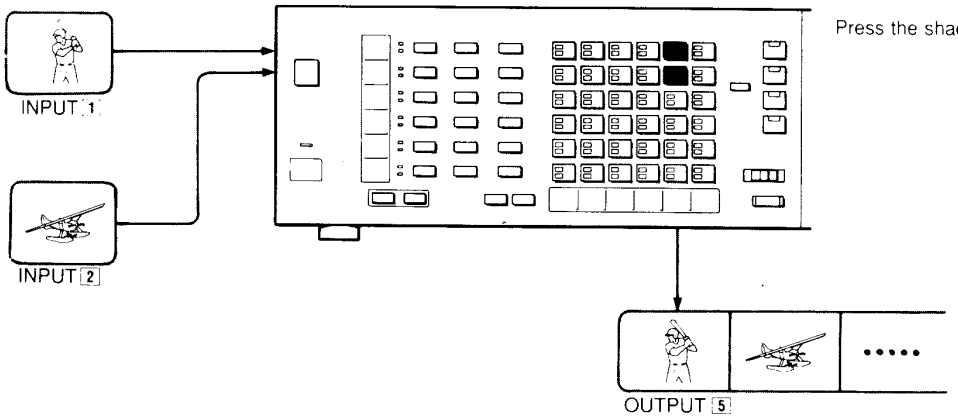
Press the shadowed buttons.

The playback pictures from the VCRs connected to INPUT 1, INPUT 2, and INPUT 3, are recorded on the VCRs connected to OUTPUT 4, OUTPUT 5, and OUTPUT 6 respectively at the same time.

To watch the picture being edited on the monitor
Select the monitor to be used and the picture to be monitored using the MONITOR selector and the INPUT/OUTPUT selector. See "Monitoring the Picture from the Video Equipment" on page 18.

To prevent accidental operation during editing or dubbing
After inputs and outputs are designated for all the equipment, press the MODE LOCK button on the front panel to ON before starting editing or dubbing. When the MODE LOCK button is set to ON, the MATRIX SELECT buttons, V ▸ S switches, AUX AUDIO selectors, PROCESSOR selectors and MEMORY buttons (page 30) do not function even if they are accidentally pressed.

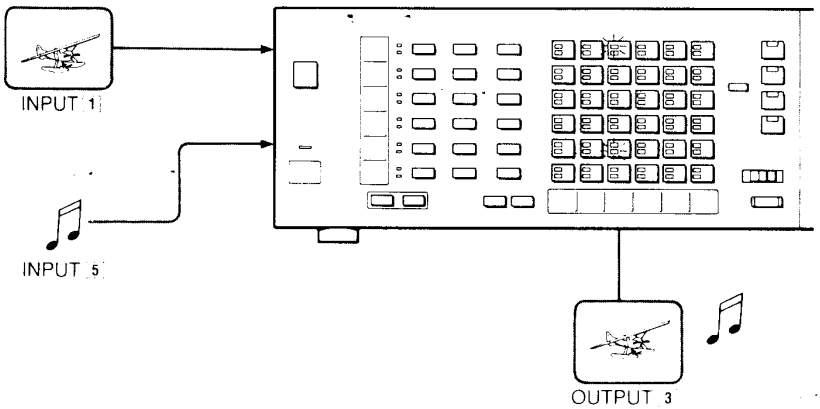
Example 3 Editing and recording the playback pictures from some VCRs on another VCR



Press the shadowed buttons alternately.

The playback pictures from the equipment connected to INPUT 1 and the equipment connected to INPUT 2 are recorded on the VCR connected to OUTPUT 5 while the pictures are switched.

Example 4 Recording on a VCR only the video or the audio signal from connected equipment (possible only in mode C)



Select only the video or audio signal with the VIDEO/AUDIO selector, and then press the shadowed buttons.

Only the video signal from the equipment connected to INPUT 1 and only the audio signal from the equipment connected to INPUT 5 are recorded on the VCR connected to OUTPUT 3.

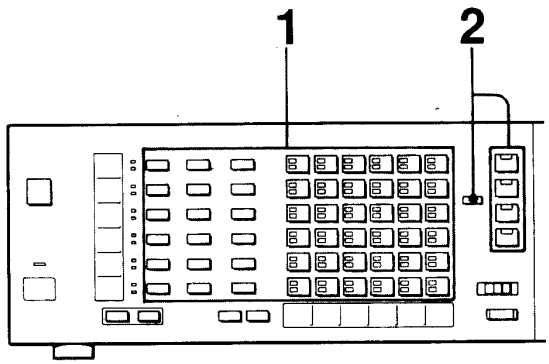
To designate inputs/outputs again from the beginning
Press the CLEAR button on the front panel. All the settings of the MATRIX SELECT buttons, V • S switches, AUX AUDIO selectors and PROCESSOR selectors will be canceled—and you can do the input/output designation all over again.

To record the signals input from two different sources alternately
When the input signal is switched to the other one, set the recording VCR in the pause mode. Otherwise, the picture may be distorted at the point where the inputs were switched.

Memorizing Input/Output Setting

The designated sets of input/output can be memorized with the use of the MEMORY buttons. Each MEMORY button (M1 - M4) can memorize one input/output set. So 4 input/output sets can be put into memory.

Memorizing

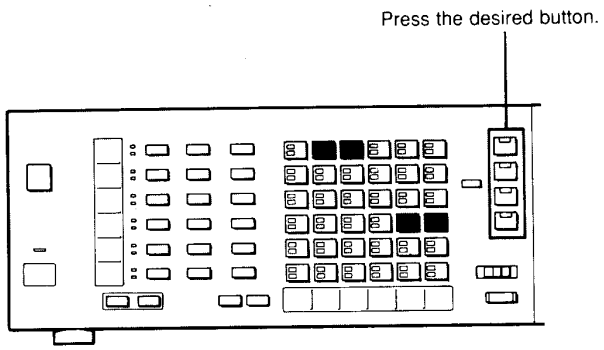


1 **Press or set the buttons, switches, and selectors as desired to complete the input/output designation.**

2 **While pressing the SET button, press one of the buttons M1 - M4, where the designation is to be memorized.**

Calling the Memorized Input/Output Designation

Press one of the buttons M1 - M4, where the desired input/output designation is memorized. Just one press on the button will place the unit in the desired preset condition.



To change the input/output designation in memory
After designating a new input/output set, press one of the M1 - M4 buttons with the SET button depressed, and the new designation will replace the former one memorized in the pressed MEMORY button. The present memory cannot be erased without memorizing a new input/output set designation.

Using the Remote Commander

The unit can be remotely controlled using the remote commander supplied. In the operation with the remote commander, buttons and indicators on the main unit light up just as they do in the operation with the main unit. The operating procedure using the remote commander, however, may be slightly different from that followed on the main unit.

Note

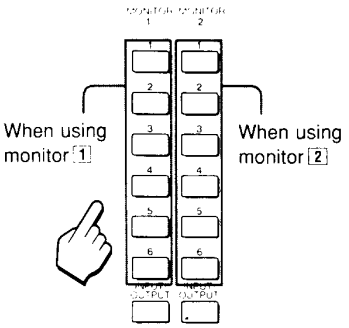
The output modes A, B, and C cannot be exchanged on the remote commander.

Turning Power On/Off

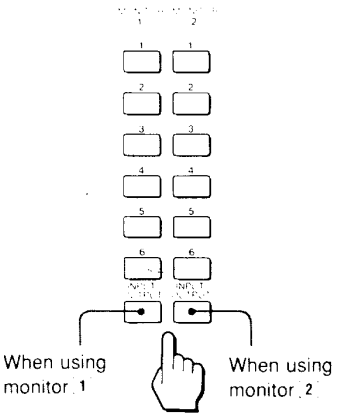
POWER

Monitoring the Picture from the Video Equipment

1 Select the monitor to be used (1 or 2) and press one of the 1 - 6 buttons to designate the jack to be monitored.



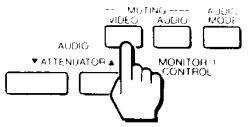
2 Press the INPUT/OUTPUT selector to select the picture to be monitored: the picture input from the INPUT jacks or that output to the OUTPUT jacks.



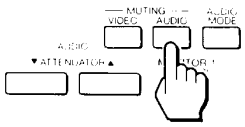
Adjusting the Monitor 1

Muting the picture or sound

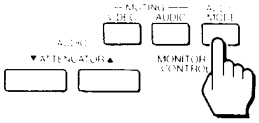
To mute the picture



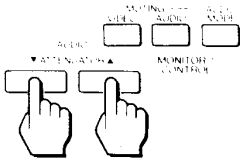
To mute the sound



Switching the sound to stereo, monaural, left only, or right only



Adjusting the volume



Designating Input/Output Equipment

Operating procedure

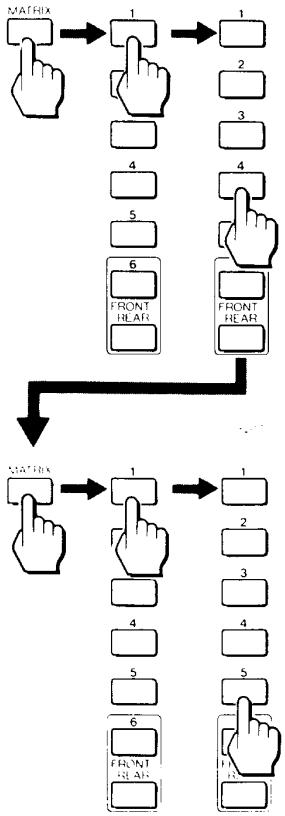
1 Press the MATRIX button.

2 Press one of the 1 - 6 buttons below the MATRIX button to designate the number for the input jack where the input equipment (the equipment for playback) is connected.

3 Press one of the 1 - 6 buttons to designate the output equipment.

Example

Input from INPUT 1 and output to OUTPUT 4 and 5

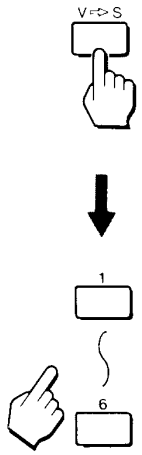


How to use the CANCEL button
Press the CANCEL button when the OUTPUT MODE indicator blinks with the input/output designation invalid in the selected mode, or when you discontinue the designation that can be completed by pressing two or more buttons in sequence.

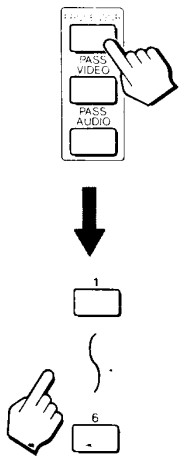
Note that the designation cannot be canceled with the CANCEL button if the button is pressed after completing the designation.
To cancel the completed designation, press the CLEAR button, and all of the designation will be canceled.

ıving a Special Setting to the Input Equipment

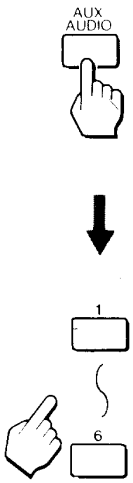
ınsforming the ıposite video signal o the S video signal



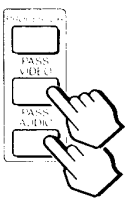
Adding special effects with the AV processor



;ording sound from equipment ınected to the AUX DIO jacks



Designating the input jack that does not exist on the AV processor, or monitoring the picture or sound without the special effects added



Selecting only the video or the audio signal for output in mode C

Memorizing the Input/ Output Setting

Memorizing

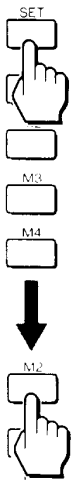
Operation procedure

1 Press the SET button.

2 Press one of the MEMORY buttons M1 - M4 that memorizes the setting.

Example

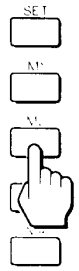
To memorize on the M2 button



Calling the memorized setting

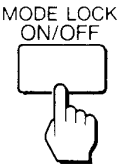
Example

To call the input/output setting memorized on M2



Others

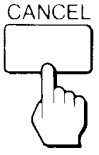
Locking the buttons, selectors, and switches to prevent accidental operation



Canceling all input and output designations

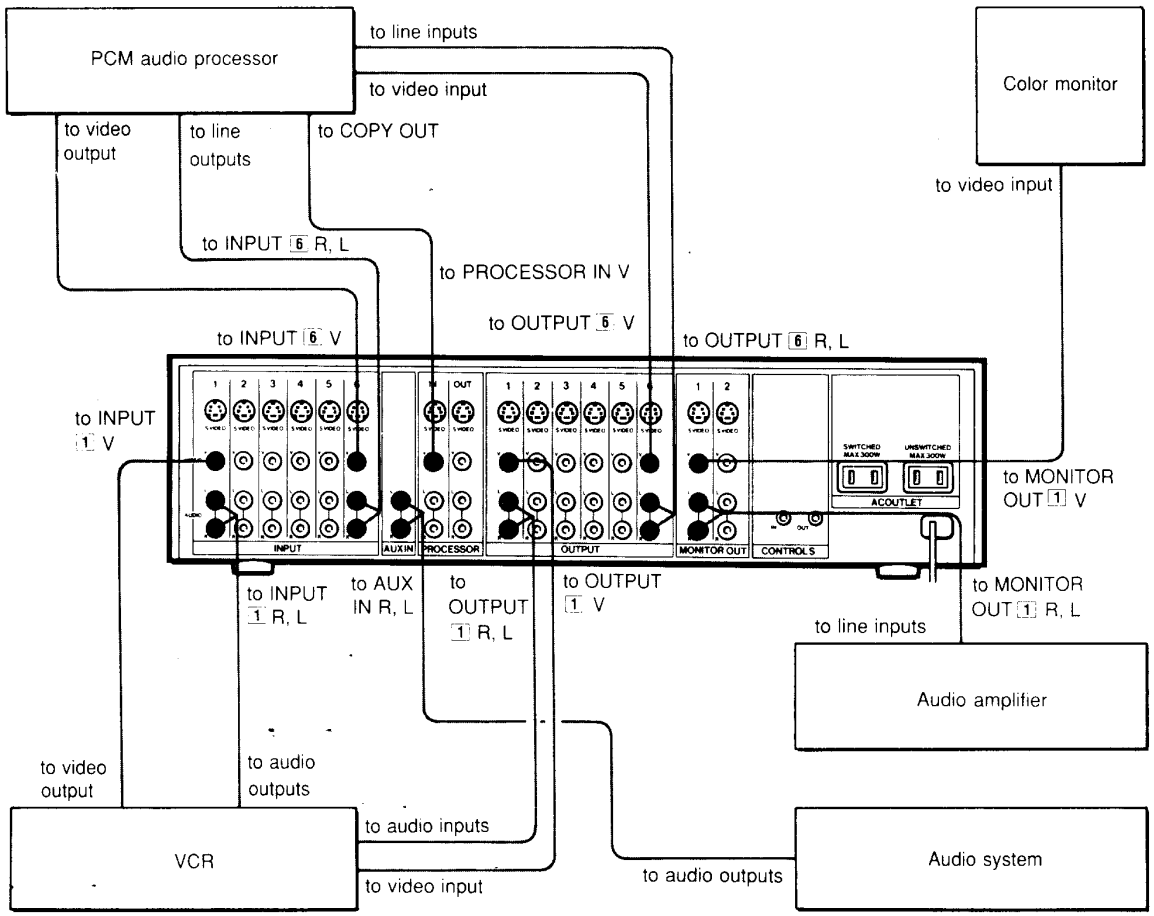
Selecting for use the input/output 6 jacks on the front or at the rear

Canceling the last pressed button on the remote commander



Connecting the PCM Audio Processor

Connection



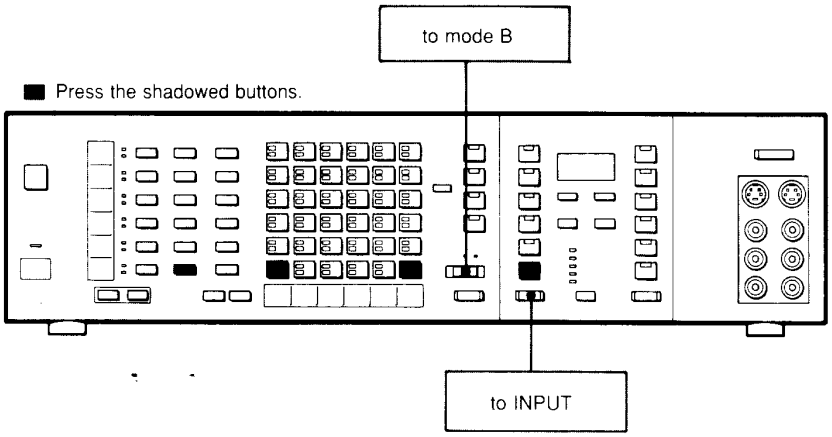
When two or more VCRs are used in the system, connect them to the INPUT 2 – 5 and OUTPUT 2 – 5 jacks.

Recording Sound

OUTPUT MODE switch	to mode B
Signal flow setting	• Press the AUX AUDIO button of the number corresponding to the INPUT jack connected to the PCM audio processor. • PCM audio processor to VCR • PCM audio processor to PCM audio processor
Monitor setting	• Select the input signal from PCM audio processor.

Example

The PCM audio processor is connected to INPUT 6 and OUTPUT 6, and the VCR for recording to INPUT 1 and OUTPUT 1.



When recording on two or more VCRs, press the MATRIX SELECT buttons so that the signal will flow from INPUT 6 to OUTPUT 2, OUTPUT 3, and so forth.

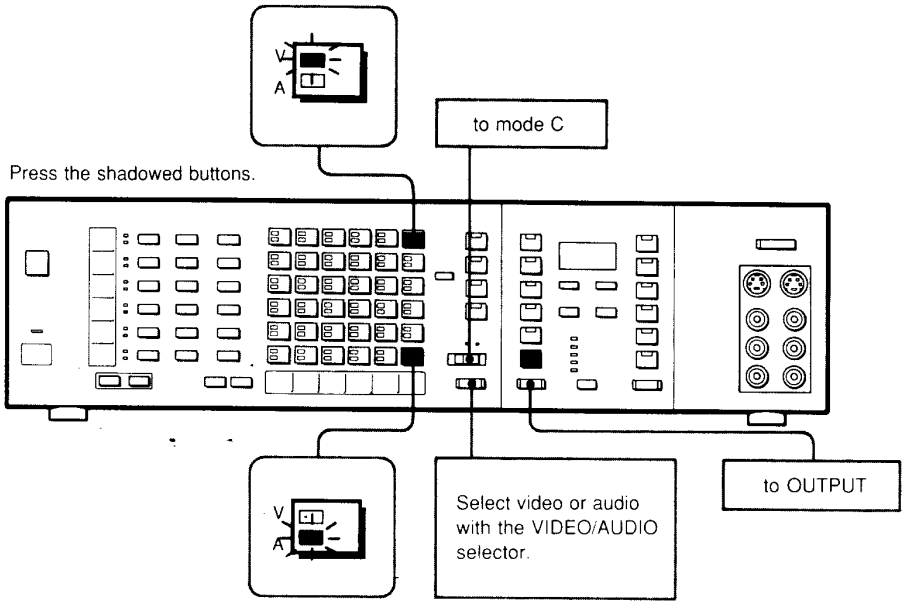
Connecting the PCM Audio Processor

Playback

OUTPUT MODE switch	to mode C
Signal flow setting	• Video signal from VCR for playback to PCM audio processor • Audio signal from PCM audio processor to PCM audio processor
Monitor setting	• Select the output signal to PCM audio processor.

Example

The PCM audio processor is connected to INPUT 6 and OUTPUT 6, and the VCR for playback to INPUT 1 and OUTPUT 1.

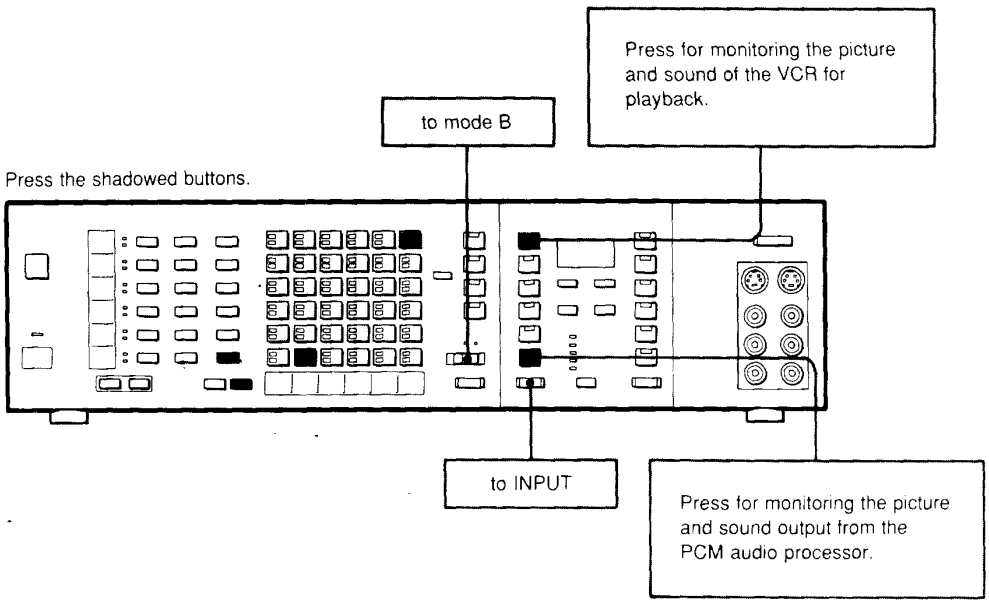


Digital Copying

OUTPUT MODE switch	to mode B
Signal flow setting	• VCR for playback to PCM audio processor • PCM audio processor to VCR for recording • Press the PROCESSOR selector of the number corresponding to the INPUT jack where PCM audio processor is connected, and press AUDIO of the PROCESSOR PASS buttons.
Monitor setting	• Select the input signal from the VCR for playback or the output signal to PCM audio processor.

Example

The PCM audio processor is connected to INPUT 6 and OUTPUT 6, the VCR for playback to INPUT 1 and OUTPUT 1, the VCR for recording to INPUT 2 and OUTPUT 2.


Press for monitoring the picture and sound of the VCR for playback.
to mode B
Press the shadowed buttons.
to INPUT
Press for monitoring the picture and sound output from the PCM audio processor.

When recording on two or more VCRs, press the MATRIX SELECT buttons so that the signal will flow from INPUT 6 to OUTPUT 2, OUTPUT 3, and so forth.

Specifications

Inputs/outputs

S video inputs (8)

Jack type	4-pin mini DIN
Y signal	1 Vp-p, 75 ohms unbalanced (when terminated), sync negative
C signal (burst signal)	0.286 Vp-p, 75 ohms unbalanced (when terminated)

S video outputs (10)

Jack type	4-pin mini DIN
Y signal	1 Vp-p, 75 ohms unbalanced (when terminated), sync negative
C signal (burst signal)	0.286 Vp-p, 75 ohms unbalanced (when terminated)

Video inputs (8)

Jack type	Phono jack
Reference signal input	1.0 Vp-p, 75 ohms unbalanced (when terminated)
Sync	Negative

Video outputs (10)

Jack type	Phono jack
Output level	1.0 Vp-p, 75 ohms unbalanced (when terminated)
Sync	Negative
Signal-to-noise ratio	More than 48 dB
Crosstalk	More than 45 dB (3.58 Mhz)

Audio inputs (9)

Jack type	Phono jack
Reference signal input	−10 dB
Input capacity	2.0 Vrms
Input impedance	More than 47 kilohms

Audio outputs (10)

Jack type	Phono jack
Output impedance	Less than 5 kilohms
Gain	0 dB (MONITOR 1: 0 dB to −60 dB variable)
Signal-to-noise ratio	More than 80 dB
Separation	More than 80 dB
Crosstalk	More than 80 dB

CONTROL S input/output

Jack type	Mini jack

Others

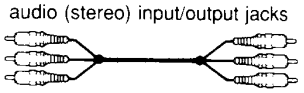
Power requirements	120 V AC, 60 Hz
Power consumption	44 W (5.5 W during idling)
AC outlet	1 switched: 300 watts max. 1 unswitched: 300 watts max.
Dimensions	430 x 115 x 370 mm (w/h/d) (17 x 4 5/8 x 14 5/8 inches)
Weight	Approx. 7.1 kg (15 lb. 10 oz.)
Accessories supplied	Remote commander RMT-3000 (1) Sony SUM-3(NS) batteries (2) Labels for input/output selection (1 set)

Remote commander RMT-3000

Remote control system	Infrared control
Power requirements	3 V DC
Dimensions	67 x 20 x 176 mm (w/h/d) (2 3/4 x 13/16 x 7 inches)
Weight	Approx. 110 g (4 oz.) not including batteries

Design and specifications are subject to change without notice.

Recommended connecting cords (optional)

YC-15V/YC-15EV (1.5m) **YC-30V/YC-30EV** (3m)	S video input/output jacks ↔ S video input/output jacks 4-pin mini DIN — 4-pin mini DIN
VMC-1S (1.2m) **VMC-3S** (3m)	Video input/output jacks ↔ Video input/output jacks Phono plug (yellow) — Phono plug (yellow)
RK-C74 (1.5m)	Audio input/output jacks (stereo) ↔ Audio input/output jacks (stereo) Phono plug (x2) — Phono plug (x2)
VMC-810S (1m) **VMC-820S** (2m)	Video and audio (stereo) input/output jacks ↔ Video and audio (stereo) input/output jacks  Phono plug (x3) — Phono plug (x3)